



Testimony before the Joint Standing Committee on State and Local Government

By Thomas Abello, Director of External Affairs for The Nature Conservancy

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Re: LD 540 - An Act to Help Municipalities Prepare for Changes in Sea Level

Senator Davis, Representative Martin, and members of the Joint Standing Committee on State and Local Government, my name is Tom Abello and I am the Director of External Affairs for The Nature Conservancy in Maine. I appreciate this opportunity to testify in support to LD 540, An Act to Help Municipalities Prepare for Changes in Sea Level.

The Nature Conservancy is a global conservation organization dedicated to conserving the lands and waters on which all life depends. Guided by science, we create innovative, on-the-ground solutions to our world's toughest challenges so that nature and people can thrive together. Working in more than 65 countries, we use a collaborative approach that engages local communities, governments, the private sector, and other partners. The Nature Conservancy has been working in Maine for nearly 60 years and is the 12th largest landowner in the state, owning and managing roughly 300,000 acres. We also work across the state to restore rivers and streams to support healthy fish populations and work with commercial fishermen in the Gulf of Maine to rebuild groundfish populations.

LD 540 amends the State's growth planning and land use laws to reflect that addressing the effects of sea level rise is a state planning and regulatory goal. The bill amends the laws regarding the State's coastal management policies to direct state, local and certain federal agencies responsible for regulating, planning, developing or managing coastal resources to conduct their activities affecting the coastal area consistent with the policy of encouraging the assessment of and planning for the effects of the rise in sea level. The bill provides that a coastal municipality or region that adopts a growth management program under the State's growth planning and land use laws may include in its comprehensive plan projections regarding sea level changes and the potential effects of the rise in sea level and may develop a coordinated plan for addressing the effects of the rise in sea level.

Per the National Oceanic and Atmospheric Administration (NOAA), tide gauges show that global sea level has risen about 7 inches during the 20th century, and recent satellite data show that the rate of sea-level rise is accelerating. Sea levels are rising mainly because ocean water expands as it warms; and water from melting glaciers and ice sheets is flowing into the ocean.

This bill makes sense as communities up and down the coast are discussing and planning for how rising waters, higher winds and storm surge will affect roads, pumps, wastewater treatment plants, buried power lines and utility poles. Encouraging towns and the state to broaden the scope of planning efforts to address the potential impacts of the changes in sea level makes economic sense and helps keep coastal communities safe. Carefully sited development can help ensure water quality and the health of commercially harvested shellfish species.

Flooding and erosion during high tides and storm events can cause extensive damage to shorefront properties, transportation and shipping infrastructure, and coastal ecosystems—like sensitive marsh habitats, seabird nesting islands and dunes.

National Climate Assessment data predicts the sea level will rise at least 3.3 feet in the next 100 years. How would Maine be impacted? for a municipality such as Scarborough, it means 5 miles of public and private roadway would be under water during the highest tides of the year, if sea level rises by 2 feet. This link provides additional detail http://maine.gov/dacf/mgs/hazards/slr_ss/index.shtml

Coastal communities such as Damariscotta, Portland, York, Scarborough, Belfast and others are working to assess the potential impacts from sea level rise on coastal estuaries, marshes, beaches and built infrastructure.

Sea-level rise poses enormous risks to Maine's built infrastructure, commercial and residential development, wetlands and wildlife habitat. The majority of Maine's population resides in the coastal zone. Development and related infrastructure—roads, water and sewage treatment facilities, piers and homes—are damaged or impaired by flooding and storm surges. Increased storm frequency and intensity, combined with rising sea level, makes all storms more damaging, with serious economic consequences to the region and state. A University of Southern Maine economic study found that in York County alone, over 260 businesses representing \$41.6 million in wages are at risk from coastal flooding and the resulting property destruction and higher insurance costs.

From a wildlife habitat standpoint, sea level rise will alter Maine's diverse coastal habitats. Salt marshes may turn to mudflats, and today's mudflats will flood too frequently to serve the millions of hungry shorebirds that visit on their annual migrations. In other areas, increased erosion could smother commercially important shellfish habitat. Waves and currents can erode soil, bluffs, and beaches when they wash ashore at higher and higher levels. Salt water will reach farther inland and damage roots of trees, shrubs, and grasses. Salt water in groundwater will flow farther inland and "intrude" on freshwater aquifers, likely turning many coastal wells salty.

To improve the bill, the Conservancy recommends the Legislature take steps to help provide additional resources for towns to implement the details of the bill as well as incentives for communities incorporating sea level rise impacts into their planning. These could include:

- The establishment of a State Revolving Loan Fund for public infrastructure projects that address SLR such as water treatment facility upgrades and establishment of SLR safe drinking water supplies.

- Support an increase in available federal funding through Maine's Coastal Community Grant Program and Shore and Harbor Planning Grants, both of which are underfunded compared to the need. With these grant programs comes the need for increased capacity for technical assistance to communities to ensure our coastal cities and towns get the planning help they need.
- Provide state funding to identify coastal infrastructure such as roads, bridges, and culverts that are past their design life and are under increasing risk of failure.
- Support state bond funding for towns and cities to replace and repair poorly-sized culverts.

For these reasons, The Nature Conservancy urges the Committee to support LD 540, An Act to Help Municipalities Prepare for Changes in Sea Level. Thank you again for this opportunity to participate and I am happy to answer any questions now or in the future.